
EXPLANATION OF DATA

This report contains information compiled on deaths investigated by the King County Medical Examiner during the calendar year 2002. During this period, the KCME's Office assumed jurisdiction for 1,683 deaths requiring investigation out of the total 13,008 deaths (12.9%) registered by King County's Vital Statistics Office.

The geographic area served by the Medical Examiner includes all 2,130 square miles of King County, bounded by Pierce County to the south, Snohomish County to the north, Kittitas and Chelan Counties to the east and Puget Sound to the west. In 2000 the King County population was estimated to be 1,737,034¹. Included within King County are 39 cities and towns including Seattle, the state's largest city. Also within King County are Mercer Island, Vashon Island, two major airports and several colleges and universities, all coming under the Medical Examiner's jurisdiction. In King County more than twenty hospitals as well as major trauma centers serve the entire Pacific Northwest region.

The King County Medical Examiner investigates all deaths due to unnatural manners (Accident, Suicide, Homicide, and Undetermined). The location (Nearest Incorporated City to the Fatal Incident, Table 1-8, page 17) represents the location of the incident, to the nearest city, not the residential address of the individual. Each manner of death is subdivided into various sub-groupings appropriate to that manner, which together form a more detailed description of the cause and manner of death.

The variables displayed in the tables such as race, gender, age, etc., have been selected as those most likely to assist and interest individuals using these data in assembling a profile of death statistics for 2002. According to 2000 Census estimates, racial distribution of King County is 75.7% White, 5.4% Black, 4.1% two or more races indicated (new category for the year 2000), 11.3% Asian including Hawaiian and other Pacific Islanders, 0.9% Native American, and 2.6% other. Hispanic origin is separate from race in both Medical Examiner and Census data. In 2002, there were 63 decedents identified as Hispanic.

In addition, as emphasized in Table 1-9 on page 19, in 12.1% of Medical Examiner cases the incident leading to death occurred outside of King County and the decedent was probably not a resident of King County. Therefore, Medical Examiner figures cannot be directly compared to the racial distribution of King County residents. As a rough estimate, however, the only manner of death that varies from the racial distribution of the county by a large percentage is Homicide. A further discussion of these figures is found in the Homicide section on page 41.

¹ PL94-171 Redistricting File from the 2000 Census of Population and Housing.

Age groups are divided into youth and adult. The youth groups are infants (newborn to 11 months), toddlers (1-5 years), grade school (6-12 years), junior high (13-15 years), and high school (16-19 years). Adult age groups are in corresponding decades with the last being 90 years old or older.

Blood alcohol (ethanol) data included here represent the blood level at the time of death. Alcohol is metabolized at a rate of 0.015 to 0.018 grams percent per hour. Thus, if there is a significant survival interval, the blood alcohol at the time of death will be lower than at the time of incident. Consequently, blood alcohol tests are not performed in cases where death occurs more than twenty-four hours after the fatal injury. For these reasons, an unknown number of cases not tested or showing no blood alcohol may actually have had a measurable alcohol concentration at the time of the incident.

Three sections are included that review specific issues. Data are presented which highlights deaths due to drugs, firearms, and death among children and youth. The firearm data pertain to the victim because data relating to the shooter are not included in the Medical Examiner's investigation. On deaths among children and youth, the analysis focuses on violent, non-natural causes of death.

Data on natural deaths are included. However, these deaths due to natural causes are not representative of all natural deaths in King County. Natural deaths which are investigated by the Medical Examiner are those which occur suddenly and unexpectedly with no physician in attendance, or under suspicious circumstances. Such natural deaths comprise 39.4% (663/1,683) of all deaths investigated by the Medical Examiner.

The "circumstances undetermined" category includes deaths in which the manner could not be clearly determined. In some cases, serious doubt existed as to whether the injury occurred with intent or as a result of an accident. In others, lack of witnesses or prolonged time between death and discovery precluded the accurate determination of the circumstances surrounding death. Moreover, it may be difficult to assess street drug or medication overdose deaths as showing enough features to reasonably determine the manner of death.

MEDICAL EXAMINER CASES IN 2002

The following provides a summary of the raw data from the Medical Examiner's 2002 cases.

In 2002 there were an estimated 13,008 deaths in King County² (0.75% of a 2000 population estimate of 1,737,034). Of these deaths, 7,191 (55%) were reported to the Medical Examiner by medical and law enforcement personnel. Based on analysis of the scene and circumstances of death, and the decedent's medical history gathered by the medical investigators, the Medical Examiner Division assumed jurisdiction in 1,724 of these reported deaths, of which 39 were ultimately found to be non-human remains. Two cases of skeletal remains were archeological and, therefore, not of forensic interest. Throughout the discussion of data that follows, except where stated, the non-human and archeological cases are excluded. The number of cases requiring actual KCME investigation is 1,683 deaths.

Of note is that there were 5,508 deaths reported to the Medical Examiner in which jurisdiction was not assumed. The Medical Examiner's Office applies a strict interpretation of the legislative language "persons who die suddenly when in apparent good health and without medical attendance within thirty-six hours preceding death" (RCW 68.50). Jurisdiction is only assumed if both conditions (lack of medical care, apparent good health) apply and there is no attending outside physician with sufficient knowledge of the individual's natural disease condition who is able to certify the death.

Autopsies were performed in 68.5% (1,153/1,683) of the jurisdictional deaths. Autopsies by a Medical Examiner pathologist were not performed in deaths where scene, circumstances, medical history, and external examination of the body provided sufficient information for death certification. In 2002 there were 291 such deaths, accounting for 17.3% (291/1,683) of the total deaths. In addition, there were 235 deaths (13.9%) (235/1,683) certified by attending private physicians after review by and consultation with the Medical Examiner.

Several factors appear repeatedly in the unnatural deaths. Of all traffic fatalities in which tests were performed, 35% (45/130) tested positive for presence of alcohol (ethanol) in the blood. Firearms were the most frequent instrument of death in the homicides and suicides, accounting for 58% (53/92) of the homicides and 49% (98/200) of the suicides. In recognition of the importance of safety devices in traffic accidents, Medical Examiner data indicate that of the 146 vehicle occupants who died, 37% (54/146) were wearing restraints. In 17 deaths involving motorcyclists, 65% (11/17) were wearing helmets.

² Death certificates filed in King County.

The remainder were either not wearing restraints or helmets or represent cases in which the use of those items is not known.

While the discussion here tends to depict the more violent types of death, the reader should be reminded that 39.4% (663/1,683) of Medical Examiner cases involve natural deaths. Specific discussion and presentation of relevant tables regarding 2002 cases follow this brief summary.

Table 1-1 Deaths Occurring in King County and Medical Examiner Cases

CASES BY MANNER OF DEATH ³			NUMBER OF DEATHS	PERCENT OF DEATHS
Accident Other	(A)		472	28.0%
Accident Traffic	(T)		203	12.1%
Homicide	(H)		92	5.5%
Natural	(N)		663	39.4%
Suicide	(S)		200	11.9%
Undetermined	(U)		53	3.1%
Total KCME cases requiring actual investigation			1,683	100.0%
Other cases where jurisdiction was assumed ⁴			41	
Total KCME jurisdiction cases			1,724	
Total KCME cases requiring investigation ⁵			1,683	
Deaths reported to KCME but no jurisdiction was assumed (NJA)			5,508	
All other deaths in King County not reported to KCME			5,817	
ALL KING COUNTY DEATHS ⁶			13,008	

³ The letters following each manner of death will be used in most tables throughout this report.

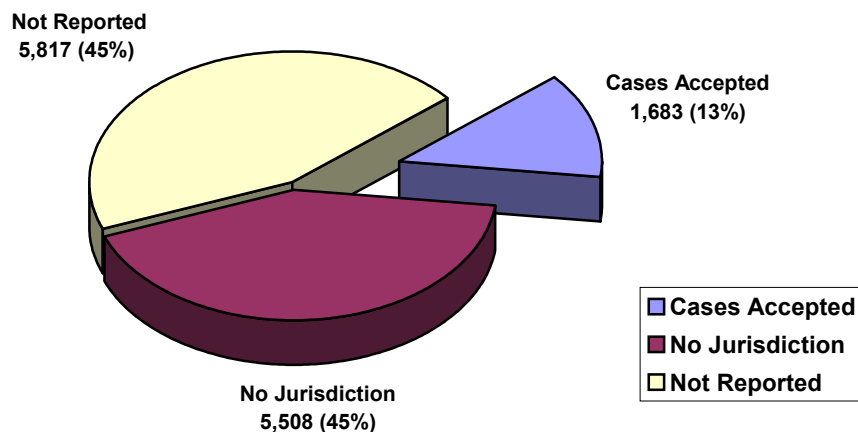
⁴ These include (36) non-human bones; (1) non-human tissue or remains; (2) human tissue or skeletal remains; and (2) archaeological skeletal remains.

⁵ This is the total that will be referred to throughout this report unless otherwise noted.

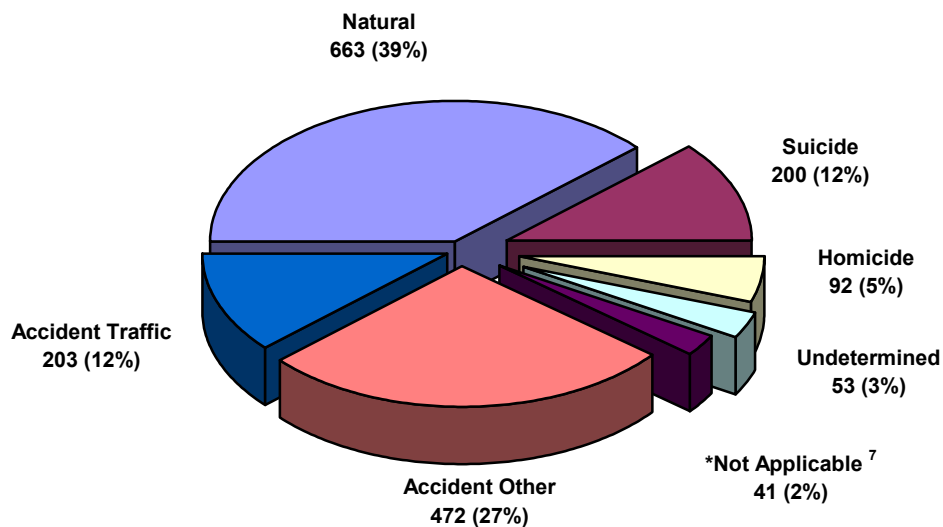
⁶ From King County Vital Statistics data.

Graph 1-1 All King County Deaths with Medical Examiner Jurisdiction Shown

There were 13,008 deaths in King County in 2002.

**Graph 1-2 Manner of Death for All Medical Examiner Jurisdiction Cases**

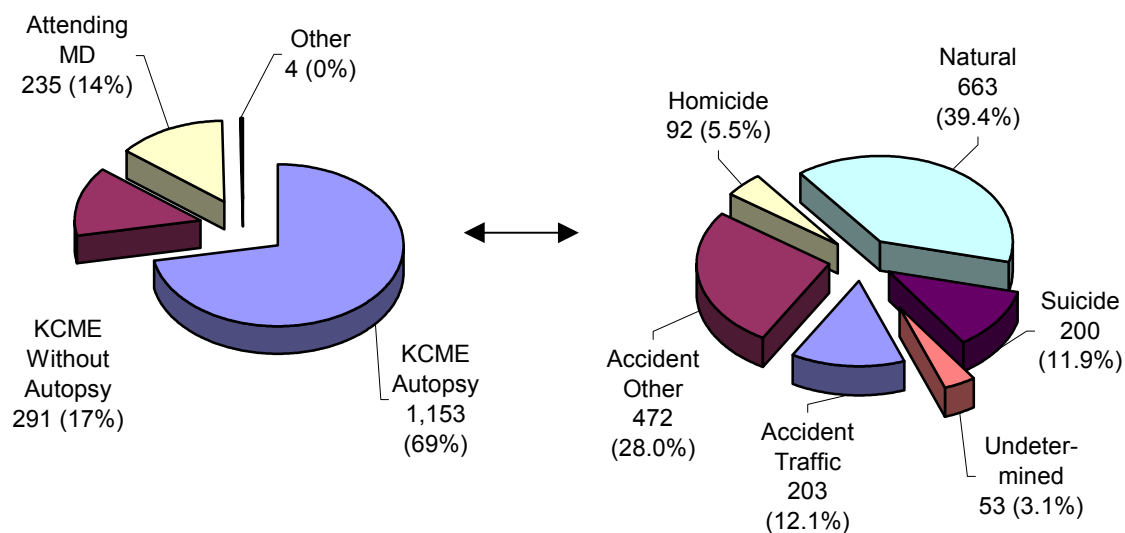
Jurisdiction assumed in 1,724 cases



⁷ Non-applicable includes (36) non-human bones: (1) non-human tissue or remains; (2) human tissue or skeletal remains; and (2) archaeological skeletal remains.

Table 1-2 Method of Certification and Manner of Death

CERTIFICATION	MANNER OF DEATH						TOTAL	PERCENT
	A	T	H	N	S	U		
KCME Autopsies	326	164	90	350	172	51	1,153	69%
KCME External Exams	81	37	0	144	28	1	291	17%
KCME Other	1	0	2 ⁸	0	0	1	4	0%
Attending Physician	64	2	0	169	0	0	235	14%
Totals	472	203	92	663	200	53	1,683	

Graph 1-3 Method of Certification for All Medical Examiner Jurisdiction Cases

⁸ Note: In 2002, the remains of victims from two (2) Homicide Deaths, were returned to the county(s) where the original injuries occurred. Being a Regional Trauma Center, King County receives victims of violence from surrounding counties. By prior agreement, remains of these victims are returned to the originating county for autopsy by the Medical Examiner of record.

MANNER OF DEATH IN 2002
King County Medical Examiner General Cases

Table 1-3 Gender and Manner of Death

GENDER	MANNER OF DEATH						TOTAL	PERCENT
	A	T	H	N	S	U		
Male	307	149	69	473	150	31	1,179	70.1%
Female	165	54	23	190	50	22	504	29.9%
Total	472	203	92	663	200	53	1,683	

Graph 1-4 Gender and Manner of Death

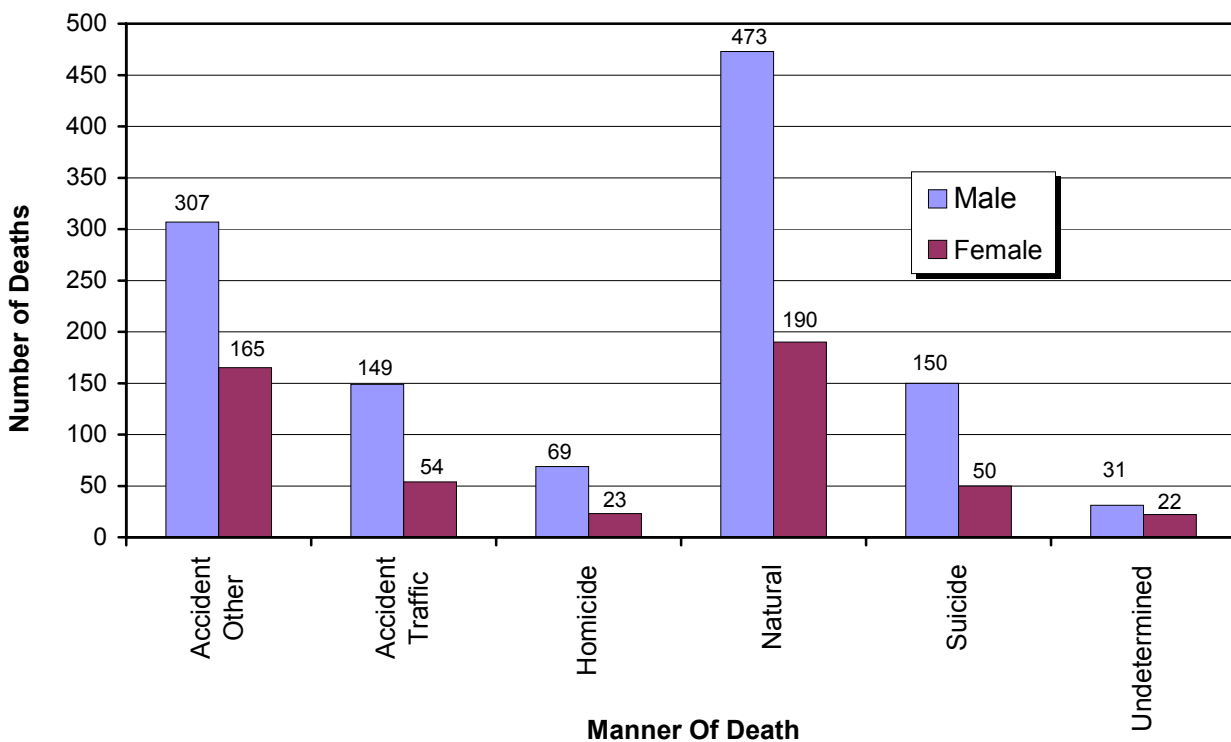


Table 1-4 Manner of Death by Age and Gender

AGE/GENDER	MANNER OF DEATH						SUB	
	A	T	H	N	S	U	TOTAL	PERCENT
Under 1 year							33	2.0%
Male	3	1	2	11	0	1	18	
Female	1	1	1	11	0	1	15	
1-5 years							19	1.1%
Male	4	1	2	2	0	0	9	
Female	5	4	0	1	0	0	10	
6-12 years							11	0.7%
Male	1	3	1	2	0	0	7	
Female	0	2	1	0	0	1	4	
13-15 years							17	1.0%
Male	5	2	2	2	2	1	14	
Female	0	1	0	1	1	0	3	
16-19 years							46	2.7%
Male	6	18	8	2	6	0	40	
Female	3	2	0	0	0	1	6	
20-29 years							149	8.9%
Male	30	32	20	8	26	6	122	
Female	6	8	4	5	2	2	27	
30-39 years							205	12.2%
Male	51	22	20	32	23	5	153	
Female	17	4	4	11	9	7	52	
40-49 years							316	18.8%
Male	67	20	4	90	34	7	222	
Female	24	5	6	34	21	4	94	
50-59 years							303	18.0%
Male	45	16	9	122	31	7	230	
Female	23	7	4	29	7	3	73	
60-69 years							167	9.9%
Male	17	11	0	86	10	3	127	
Female	9	8	0	19	4	0	40	
70-79 years							175	10.4%
Male	28	10	0	71	6	0	115	
Female	22	7	1	26	3	1	60	
80-89 years							182	10.8%
Male	39	10	1	38	10	0	98	
Female	35	5	1	40	3	0	84	
90+ years							60	3.6%
Male	11	3	0	7	2	1	24	
Female	20	0	1	13	0	2	36	
Unknown							0	0.0%
Male	0	0	0	0	0	0	0	
Female	0	0	0	0	0	0	0	
Unknown	0	0	0	0	0	0	0	
Total	472	203	92	663	200	53	1683	

Table 1-5 Manner of Death by Age and Gender

RACE & GENDER	MANNER OF DEATH						SUB	
	A	T	H	N	S	U	TOTAL	PERCENT
White							1,391	82.7%
<i>Male</i>	260	128	31	389	132	28	968	
<i>Female</i>	144	41	14	166	42	16	423	
Black							132	7.8%
<i>Male</i>	24	5	20	46	4	2	101	
<i>Female</i>	10	3	4	10	0	4	31	
Asian							91	5.4%
<i>Male</i>	10	9	7	22	9	1	58	
<i>Female</i>	6	7	4	10	5	1	33	
Native American							32	1.9%
<i>Male</i>	6	3	4	10	0	0	23	
<i>Female</i>	4	0	1	2	1	1	9	
Other							37	2.2%
<i>Male</i>	7	4	7	6	5	0	29	
<i>Female</i>	1	3	0	2	2	0	8	
Total	472	203	92	663	200	53	1,683	

Table 1-6
Manner of Death by
Marital Status and Gender

MARITAL STATUS & GENDER	MANNER OF DEATH						SUB	
	A	T	H	N	S	U	TOTAL	TOTAL PERCENT
Never Married	157	90	51	204	64	23	589	36.8%
<i>Male</i>	128	69	43	160	56	14	470	
<i>Female</i>	29	21	8	44	8	9	119	
Married	133	60	22	134	62	11	422	25.1%
<i>Male</i>	93	42	13	98	42	7	295	
<i>Female</i>	40	18	9	36	20	4	127	
Divorced	87	35	15	184	60	16	397	23.6%
<i>Male</i>	55	26	11	130	43	10	275	
<i>Female</i>	32	9	4	54	17	6	122	
Widowed	83	18	1	96	10	3	211	12.5%
<i>Male</i>	21	12	0	47	6	0	86	
<i>Female</i>	62	6	1	49	4	3	125	
Unknown	12	0	3	45	4	0	64	3.8%
<i>Male</i>	10	0	2	38	3	0	53	
<i>Female</i>	2	0	1	7	1	0	11	
<i>Unknown</i>	0	0	0	0	0	0	0	
Total	472	203	92	663	200	53	1683	

Graph 1-5
Manner of Death by Marital Status

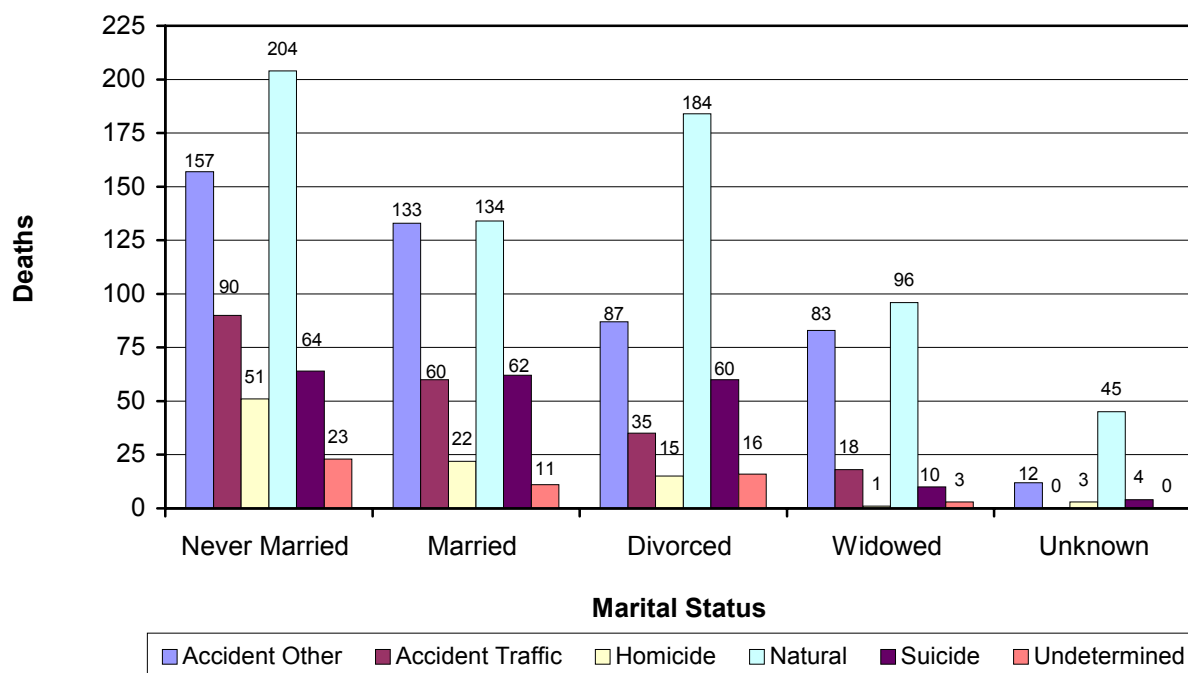


Table 1-7 Month and Manner of Death

MONTH	MANNER OF DEATH						TOTAL	PERCENT
	A	T	H	N	S	U		
Previous Year	3	0	2	14	0	1	20	1.2%
January	41	12	6	67	16	5	147	8.7%
February	42	17	6	45	18	2	130	7.7%
March	41	12	4	54	16	1	128	7.6%
April	39	18	14	54	20	0	145	8.6%
May	45	16	7	42	17	3	130	7.7%
June	38	28	5	59	19	2	151	9.0%
July	40	16	6	50	14	7	133	7.9%
August	30	17	15	57	18	9	146	8.7%
September	37	21	4	54	10	6	132	7.8%
October	37	16	7	59	20	5	144	8.6%
November	36	15	7	52	20	4	134	8.0%
December	43	15	9	56	12	7	142	8.4%
Unknown	0	0	0	0	0	1	1	0.1%
Total	472	203	92	663	200	53	1,683	

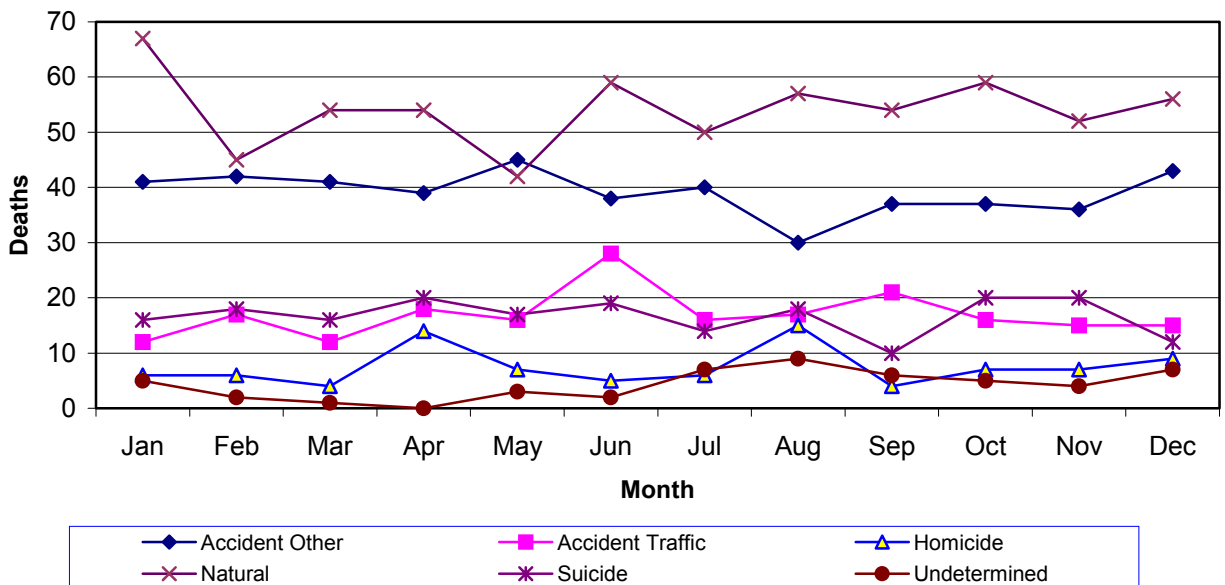
Graph 1-6 Month and Manner of Death

Table 1-8 Nearest Incorporated City to the Fatal Incident ⁸

CITY	MANNER OF DEATH					TOTAL	PERCENT
	A	T	H	S	U		
Algona	0	0	0	0	0	0	0.0%
Auburn	15	8	7	4	2	36	3.5%
Bellevue	17	3	0	10	1	31	3.0%
Black Diamond	0	0	0	1	1	2	0.2%
Bothell	2	4	0	2	0	8	0.8%
Burien	7	2	4	4	0	17	1.7%
Carnation	1	1	0	0	0	2	0.2%
Clyde Hill	0	0	0	0	0	0	0.0%
Covington	1	2	0	0	0	3	0.3%
Des Moines	11	3	0	3	2	19	1.9%
Duvall	2	2	0	1	0	5	0.5%
Enumclaw	3	2	0	5	0	10	1.0%
Fall City	1	4	0	0	0	5	0.5%
Federal Way	14	2	4	12	0	32	3.1%
Issaquah	6	5	1	3	1	16	1.6%
Kenmore	1	2	0	2	1	6	0.6%
Kent	10	11	5	15	3	44	4.3%
Kirkland	11	4	4	8	2	29	2.8%
Lake Forrest Park	2	0	0	0	0	2	0.2%
Maple Valley	2	4	1	0	0	7	0.7%
Maury Island	0	0	0	0	0	0	0.0%
Medina	0	0	0	0	0	0	0.0%
Mercer Island	6	1	0	1	0	8	0.8%
Newcastle	0	0	1	1	0	2	0.2%
Normandy Park	1	1	0	1	0	3	0.3%
North Bend	2	0	1	1	1	5	0.5%

⁸ Note: Table 1-8 does not include cases where manner of death is "Natural".

Table 1-8 (con't) Nearest Incorporated City to the Fatal Incident ⁸

CITY	MANNER OF DEATH					TOTAL	PERCENT
	A	T	H	S	U		
Pacific	2	0	0	1	0	3	0.3%
Preston	1	0	0	0	0	1	0.1%
Ravensdale	1	0	1	1	0	3	0.3%
Redmond	7	1	1	2	0	11	1.1%
Renton	15	4	2	7	1	29	2.8%
Sammamish	0	0	0	1	1	2	0.2%
SeaTac	3	4	0	4	1	12	1.2%
Seattle	207	37	41	75	29	389	38.1%
Shoreline	15	4	1	7	1	28	2.7%
Skykomish	2	1	0	1	0	4	0.4%
Snoqualmie	2	0	0	2	0	4	0.4%
Sultan	0	0	0	0	0	0	0.0%
Tukwila	5	3	2	2	0	12	1.2%
Vashon Island	3	3	0	3	0	9	0.9%
Woodinville	4	2	1	3	0	10	1.0%
Yarrow Point	0	0	0	0	0	0	0.0%
Unincorporated King County	4	1	0	1	0	6	0.6%
Outside of King County	86	82	15	16	5	204	20.0%
Unknown Location ⁹	0	0	0	0	1	1	0.1%
Totals	472	203	92	200	53	1020	

⁸ Note: Table 1-8 does not include cases where manner of death is "Natural".

⁹ The nearest city to incident and the suspected location of fatal incident are different.

OUT OF COUNTY CASES IN 2002

Within King County are several major hospitals and trauma centers that serve the entire Pacific Northwest and western United States. Consequently, there are numerous deaths each year where the incident leading to death occurred outside of King County. Because death occurred within King County, it comes under the jurisdiction of the King County Medical Examiner. In 2002 there were 204 deaths (12.1%) where the incident occurred out of county. Table 1-9 displays these deaths by incident location and manner.

Table 1-9 Fatal Incident Occurred Outside of King County ⁸

INCIDENT LOCATION	MANNER OF DEATH					TOTAL
	A	T	H	S	U	
Alaska	8	0	1	1	0	10
Arizona	0	0	0	0	0	0
California	0	1	0	0	0	1
Hawaii	0	0	0	0	0	0
Idaho	2	1	0	0	0	3
Oregon	0	0	0	0	0	0
Montana	2	1	0	0	0	3
Utah	0	1	0	0	0	1
Washington						
Kitsap County	12	7	1	0	0	20
Lewis County	2	10	0	2	1	15
Pierce County	8	6	3	1	0	18
Snohomish County	20	20	4	6	2	52
Thurston County	6	6	0	0	1	13
Other Counties	25	29	6	6	1	67
Washington Sub-total	(73)	(78)	(14)	(15)	(5)	(185)
Outside of the Country	1	0	0	0	0	1
Total	86	82	15	16	5	204

⁸ Note: Table 1-9 does not include cases where manner of death is "Natural".

